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IN THE

Supreme Court of the United States

OCTOBER TERM, 1945

No. 46

GENERAL ELECTRIC COMPANY,
Petitioner,

vs.

JEWEL INCANDESCENT LAMP COMPANY, *et al.*

PETITION FOR REHEARING

ALEXANDER C. NEAVE,
HARRY R. PUGH, JR.,
JOHN H. ANDERSON,
Counsel for Petitioner.

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PETITION FOR REHEARING

Comes now the above named petitioner, GENERAL ELECTRIC COMPANY, and presents this petition for rehearing of the above entitled cause, the decision in which was handed down November 5, 1945.

A New Rule of Law

The reason for asking for a rehearing is that the Court, in its decision in this case, has announced a rule of law which is entirely new and, we respectfully submit, contrary to the Patent Statutes.

In its opinion the Court recognizes that Pipkin created a new and useful article of manufacture. However, this Court held the patent invalid on the ground that

> "The principle of the Ansonia case plainly would deny validity to the Pipkin patent if the prior art disclosed an electric bulb so frosted on the inside as to round out the angular crevices produced by the

> first etching, whether the full utility of the bulb had been previously recognized or not. *The same result is indicated where, as in the present case, the prior art discloses the method of making an article having the characteristics of the patented product,* though all the advantageous properties of the product had not been fully appreciated. Lovell Mfg. Co. *v.* Cary, 147 U. S. 623." (Italics ours.)

The first part of this statement sets forth the law as it has long been understood, but the rule announced in the second part upon which the decision in the present case is based—that a patent for a new article is invalid if a known method can be used to make such an article—is, we respectfully submit, a departure from the Patent Statutes, unsupported by any previous decision and in conflict with the law announced by this and other courts.

The relevant portion of the Patent Statutes states,

> "Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter or any new and useful improvements thereof, * * * may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor." (35 USC § 31)

The Statute states that "any person who has invented or discovered any new and useful manufacture * * * or any new and useful improvements thereof" is entitled to a patent. It does not require that this new article must be produced by a new method. Pipkin created a new article of manufacture—an inside frosted bulb having an etched inner surface characterized by rounded rather than by sharp angular crevices—an article that never existed before. In the present case, as in the case of many, if not most, inventions for a new article, once the article has been invented, once the structural characteristics of the desired article are conceived, it is possible to make the article by known methods, but this does not defeat the patentability of the new article under the Statute or under the law as it existed prior to this decision.

A new and highly useful article of manufacture having been invented, the methods which can be used in making the new article have no bearing upon the patentability of the article.

As the Circuit Court of Appeals for the Sixth Circuit stated in considering the Pipkin patent in the *Save* case, 82 F. 2d 100, 103:

> "a new article of commerce may involve the exercise of the inventive faculty even though in producing it a known method is resorted to."

This rule has long been understood as axiomatic and as necessarily following from the Patent Statutes. Thus in the leading case of *Rubber Company* v. *Goodyear*, 76 U. S. 788, this Court sustained the product or article patent in suit, stating at page 796:

> "Patentable subjects, as defined by the patent law, are 'any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter.' A machine may be new, and the product or manufacture proceeding from it may be old. In that case the former would be patentable and the latter not. The machine may be substantially old and the product new. In that event the latter, and not the former, would be patentable. Both may be new, or both may be old. In the former case, both would be patentable; in the latter neither. The same remarks apply to processes and their results. Patentability may exist as to either, neither, or both, according to the fact of novelty, or the opposite. The patentability, or the issuing of a patent as to one, in nowise affects the rights of the inventor or discoverer in respect to the other. They are wholly disconnected and independent facts. Such is the sound and necessary construction of the statute."

Similarly, in *Badische Anilin & Soda Fabrik* v. *Kalle*, 94 Fed. 163, affirmed 104 Fed. 802, the Court sustained the patent for a new article of manufacture, stating at page 174:

> "It is enough that he has produced an entirely new and useful product by a method which, though ab-

> stractly old, had never been applied to the material in question which was supposed to be incapable of such treatment."

In Robinson's *The Law of Patents*, the standard treatise on the law of patents, it is stated at page 272:

> "a manufacture, if new in itself, may be patentable, whether the process or apparatus by which it is produced be new or old."

We believe that the Court in the present case has inadvertently adopted a directly contrary rule which finds no support in the statute or in prior decisions.

The cases cited by the Court in its opinion do not actually support the rule announced and followed in the present case. Thus, in the *Ansonia* case the article patented was old and therefore could not validly be patented under the statute, which calls for a *new* manufacture.

The case of *Radio Corp.* v. *Radio Laboratories*, 293 U. S. 1, 14, merely holds that the possible failure of an inventor of a new article to appreciate all of the potencies of his new article does not invalidate his patent.

In *Lovell Mfg. Co.* v. *Cary*, 147 U. S. 623, the patent was for a method, not a product. The patent for "a method of tempering furniture springs or other coiled springs" was held invalid for lack of invention, the same process having been used previously to temper other springs with similar results. Since the result obtained by using the process on furniture springs was one which was known in connection with treating other springs, the use of such process to temper furniture springs was an obvious one as soon as steel springs were used for furniture.

In *De Forest Radio Co.* v. *General Electric Co.*, 283 U. S. 664, the Court held the patent for a "high vacuum tube" invalid because it was known that a high vacuum in a tube would achieve the desired result, and therefore the inventor could not be said to have invented or conceived such an article. As this Court stated on pages 678, 679 and 682:

> "Even though the improvement was accomplished by so simple a change in structure as could be brought

about by reducing the pressure in the well known low vacuum tube by a few microns, still it may be invention. Whether it is or not depends upon a question of fact, whether the relationship of the degree of vacuum within the tube, to ionization, and hence to the stability and effectiveness of discharge passing from cathode to anode, was known to the art when Langmuir began his experiments. If that relationship was then known, it required no inventive genius to avoid ionization and secure the desired result by creating the vacuum in a DeForest tube or other form of low vacuum discharge device.

"That this relationship was known was the fact found by the District Court and not challenged by the opinion of the Court of Appeals.

* * * * *

"The question is not, as respondent argues, whether Lilienfeld or others made a practical high vacuum tube, but whether they showed how it could be made and *demonstrated and disclosed the relationship of the discharge to reduced pressure*, and how to reduce it. See Corona Co. *v.* Dovan Corp., 276 U. S. 358, 384" (Italics ours).

The opinion in the ~~De Forest~~ Langmuir case indicates, we submit, that the ~~De Forest~~ Langmuir patent would have been held valid if no one prior to De Forest had made or suggested a high vacuum tube or had recognized the relationship between reduced pressure and the discharge within the tube.

In the present case no one prior to Pipkin had made or suggested an inside frosted bulb with rounded crevices, and no one had "demonstrated and disclosed the relationship" between rounded crevices and strength.

Similarly, in *Corona Co.* v. *Dovan Corp.*, 276 U. S. 358, a patent for the use of diphenylguanidine as an accelerator in vulcanizing rubber was held invalid because someone other than the patentee had previously used that same substance for the same purpose. The decision in the *Corona* case assumes that if no one prior to the inventor had recognized the desirability of using diphenylguanidine as an accelerator, the patent in suit would have been valid

despite the admitted fact that the compound itself was previously known.

We submit that none of these cases cited by the Court support the rule of law announced by it in this case.

The Court has here rejected established guides for the determination of invention.

If the Court's decision be in part based upon the view that there exists no "invention" in Pipkin's accomplishment, we respectfully submit that the Court has rejected the most useful and widely accepted guide to invention existing in the patent laws.

It has long been established by the decisions of this and other courts that the words of the Statute "invented or discovered" require something beyond mere newness. The development must amount to an "invention". But what constitutes an invention? The courts have frequently said that the new thing must be something beyond the skill of the ordinary worker in the art at the time the invention was made. In the leading case of *Atlantic Works* v. *Brady*, 107 U. S. 192, 200, frequently cited by this Court, it was stated:

> "The design of the patent laws is to reward those who make some substantial discovery or invention, which adds to our knowledge and makes a step in advance in the useful arts. Such inventors are worthy of all favor. It was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures."

But how are we to determine whether the new thing would "naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures"? What circumstances tend to show that the new contribution would not have been made by the man who is merely skilled in the art?

The "historical approach"

Over the course of the years this and other courts have established certain guides or rules of thumb to assist them in answering these perplexing questions. Certainly the one which has had the most support by our courts is the "historical approach". Where a problem has existed for many years, where attempts have been made to solve the problem and those attempts have been unsuccessful, and where the patentee's solution meets with success, these facts show that that solution was beyond the powers of the ordinary man skilled in the art.*

The facts here show invention

The facts of this case, as set forth by this Court in its opinion**, fall squarely within this most commonly accepted guide to invention. The problem of devising a satisfactory inside frosted lamp existed for many years; unsuccessful attempts were made to solve the problem; the early attempts to inside frost the bulb made it fatally weak, so the art turned away from this approach to a solution, and sought the answer in outside frosting, molding, coating and painting; but Pipkin went against this trend, went back to inside frosting, taking the unsuccessful and already fatally weak bulb and making it 1200% stronger by eating away more glass from its very thin surface. The fact that he used a known process of double etching to produce his product has no more significance than if he had used a hammer and chisel. The important thing is that Pipkin invented a new and highly useful article of manufacture—an inside frosted bulb with a rounded crevice surface structure. It had never

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* *Potts* v. *Creager*, 155 U. S. 597, 608;
Loom Co. v. *Higgins*, 105 U. S. 580, 591;
Diamond Rubber Co. v. *Consolidated Co.*, 220 U. S. 428, 435;
Eibel Process Company v. *Minnesota & Ontario Paper Company*, 261 U. S. 45, 68.

**The facts stated by the Court are correct except in two particulars which are discussed in the Appendix.

existed and had never been suggested before. His new article was an important advance in the electric lamp industry. Both the history of the art and a consideration of what was then known show that what he did was not an obvious thing.

There was nothing in the prior art to indicate that the rounded crevice frosting produced by double acid etchings would be a desirable frosting to use in inside frosted lamp bulbs, and everything pointed to the contrary. It was not known that this rounded crevice frosting would result in a stronger article, and it had never been used in any article where strength was a problem. It had been suggested only for things like screens, plates and drinking glasses.* It was natural to suppose that a further etching, removing additional glass, would further weaken the inside frosted bulb which had already been made fatally weak by the first etching.

This Court having found this patent invalid, has in effect rejected the most important guide to the determination of invention that exists in the patent law. It leaves those who are interested in incentives to research, such as inventors and business men, and those of the Bar who deal with the patent law, at a complete loss to know what constitutes invention, the determination of which is difficult at best but becomes practically impossible when the established guides are overthrown.

This Court says in the present case:

> "But that [adapting the discovery to a useful end] did not advance the frontiers of science in this narrow field so as to satisfy the exacting standards of our patent system."

The courts have agreed that Pipkin's contribution was an important one for the electric lamp industry. It may not have "advanced the frontiers of science" but it most certainly did "promote the progress of * * useful arts" as required by the Constitution (Art. I, Sec. 8). But this Court has held that in spite of this contribution being an important one, the "advance" was not sufficient "to satisfy the exacting standards of our patent system". What de-

*See Appendix

gree of advance is required? Is it meant that although this contribution was an important one to the useful art of incandescent electric lamps, the advance, to be patentable, must be more than an important one? And what are the "exacting standards of our patent system"? The Court here seems to reject the long established measuring stick for these standards, the determination of invention by the historical approach, and to give no clue as to what are the guides which lead to the determination of the "exacting standards" to which it refers.

In the case of most patents, as in the present case, inventors and the patent owners have invested time, effort and money in making the invention and securing a patent, thus disclosing it to the world in good faith and with the belief that a patent will give them what it purports to grant—the right to exclude infringers for the life of the patent. Unless the standard of invention which is set by this Court is one which can be met in more than the very rare case where the invention is substantially unrelated to prior knowledge, and unless some practical guides to the determination of the required standard are allowed to remain or are established, the patent system will not long continue to serve as the vigorous incentive to research and the disclosure of inventions which Congress intended.

The facts in this case plainly show that, in the words of the Patent Statute, Pipkin has "invented or discovered a new and useful manufacture" and is therefore entitled to the reward of a valid patent promised by that statute.

WHEREFORE, your petitioner respectfully urges that this petition for rehearing be granted and that the judgment of the Third Circuit Court of Appeals be, upon further consideration, reversed.

Respectfully submitted,

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HARRY R. PUGH, JR.,
JOHN H. ANDERSON,
Counsel for Petitioner.

November 30, 1945.

Certificate of Counsel

I, Alexander C. Neave, counsel for the above named petitioner, do hereby certify that the foregoing petition for a rehearing of this cause is presented in good faith and not for delay.

Alexander C. Neave
Counsel for Petitioner

Appendix

In its opinion the Court states:

> "But Sprechsaal in 1912 specifically described the application of successive etchings to electric bulbs."

We respectfully point out to the Court that this statement is erroneous and was induced no doubt by a similar statement appearing in respondents' brief at page 42. The portion of the Sprechsaal 1912 article on which respondents apparently relied in making this statement reads as follows:

> "After frosting the bulbs are washed with hot water *to which a little acetic acid is added whereby the coating produced in the frosting bath is better dissolved.*"

The important thing to note about this Sprechsaal statement is that the acid used in the washing step is *acetic* acid, which, of course, does not etch glass, and therefore this Sprechsaal publication does not show "the application of successive etchings to electric bulbs," as this Court mistakenly thought. The earlier Sprechsaal article of 1907 shows double acid etching to decorate glasses, but in the 1912 article about etching lamp bulbs only the ordinary single etching method is suggested, followed by a non-etching acetic wash. The satin finish frosting produced by double etching was obviously not considered appropriate for lamp bulbs.

The Court also states in its opinion in this case that the Wood patent

> "observed that successive acid treatments of glass rounded out the sharp angular crevices produced by the first etching."

Actually, of course, Wood shows only one acid treatment, the first etching being by means of sandblasting. The undisputed evidence shows that the Wood method would not produce a sufficient frosting to meet the terms of the Pipkin

claims (R. 58, 62) and the Wood patent shows that he was seeking "brilliancy of image." He does not suggest applying his method to the *inside* of a lamp bulb, which would obviously be impracticable, and he was not faced with any problem of strength, the ordinary outside frosted bulbs then on the market being satisfactorily strong. It would be natural to suppose that his method, even if it were possible to sandblast the interior of a bulb, would result in an even weaker bulb than the fatally weak bulb produced by ordinary frosting.

SUPREME COURT OF THE UNITED STATES.

No. 46.—October Term, 1945.

General Electric Company, Petitioner, *vs.* Jewel Incandescent Lamp Company, et al.	On Writ of Certiorari to the United States Circuit Court of Appeals for the Third Circuit.

[November 5, 1945.]

Mr. Justice Douglas delivered the opinion of the Court.

This is a suit for infringement of Pipkin Patent No. 1,687,510 issued to petitioner, assignee of Marvin Pipkin, on October 16, 1928. The District Court found the patent to be invalid and also that the accused structure did not infringe. It accordingly dismissed the bill. 47 F. Supp. 818. The Circuit Court of Appeals affirmed, holding the patent invalid. 146 F. 2d 414. The case is here on a petition for writ of certiorari which we granted because of a conflict of decision among the Circuit Courts of Appeals.[1]

The patent relates to a frosted glass bulb for electric lamps. It is defended here as a product not a process patent. The product is described in the first claim as follows:

> "A glass electric lamp bulb having its interior surface frosted by etching so that the maximum brightness of an ordinary incandescent lamp comprising such a bulb will be less than twenty-five per cent of that of said lamp with a clear bulb, said interior bulb surface being characterized by the presence of rounded as distinguished from sharp angular crevices to such an extent that the strength to resist breakage by impact is greater than twenty per cent of that of the clear bulb."

[1] The Circuit Court of Appeals for the Sixth Circuit in General Electric Co. v. Savq Sales Co., 82 F. 2d 100, and the Circuit Court of Appeals for the Second Circuit in General Electric Co. v. Wabash Appliance Corp., 93 F. 2d 671, held the patent valid. The corresponding Canadian Pipkin Patent No. 289,379 was held invalid by the Supreme Court of Canada. Fuso Electric Works v. Canadian General Electric Co., 1940 Can. L. Rep. 371. The British Pipkin patent, No. 228,907, was held invalid by the High Court of Justice. British Thomson-Houston Co., Ltd. v. Tungstalite, Ltd., 57 Pat. Journ. 271 (1940).

Many years prior to the Pipkin patent, efforts had been made to reduce the glare produced by the brilliant filament of an incandescent lamp having a clear bulb. The most common method of reducing the glare was to frost the outside surface with an acid frosting solution. While bulbs so treated reduced the glare, the rough outside surface collected dirt and was difficult to clean, with the result that the light output was further reduced. Twenty-five years before Pipkin, Kennedy (patent No. 733,972 issued July 21, 1903) had showed an inside frosted bulb. But a difficulty appeared. When the outside surface of a bulb was frosted the strength of the bulb was not materially affected. When the inside surface, however, was frosted, the strength of the bulb was substantially reduced, making it unfit for practical use. Pipkin recited these facts in his specifications and stated, "The object of my invention is to produce an inside frosted glass bulb which will be much stronger than those heretofore produced." He went on to state that the preferred method of frosting was by use of a chemical medium which, when applied so as to produce the proper light diffusion, made the bulb extremely fragile. And he added: "I have found, however, that if the bulb is given a further treatment, which I term a strengthening treatment, in which it is subjected to an etching or frosting treatment of lower degree than that to which it was first subjected, it becomes quite strong. Indeed, it may be made practically as strong as the original clear glass bulb." He gave as the probable explanation the fact that the first treatment produced sharp, angular crevices or pits in the glass, while the second or strengthening treatment ate away additional glass and rounded out the angular crevices into saucer-shaped pits.[2] The fact that the bulb was strengthened when additional glass was dissolved was referred to by the court below as "Pipkin's paradox". The patent contains charts showing the relative extent to which the strength of the bulb is weakened by the first frosting treatment and its strength restored by the second

[2] One of the experts when asked for the explanation of this phenomenon testified: "Because in the instance where we have sharp angular crevices on the inside surface and the bulb is subjected to impact on its outer surface, the inner surface tends to be extended and therefore it is put into tension and the sharp angular crevices are the starting point for cracks, whereas in the case . . . where the crevice has been rounded out the impact against a bulb having on its inner surface this type of frosting, is such that the testing effort is spread over a very much larger area and the bulb is almost as strong as it was before frosting."

treatment. The patent also shows that while the bulb of the patent materially reduced the glare obtained in a clear bulb, the lighting efficiency of the two is substantially the same for any given wattage.

As the first claim of the patent indicates, the characteristic feature of the patented bulb is the fact that the interior surface is "characterized by the presence of rounded as distinguished from sharp angular crevices.". It is that feature which is responsible for the bulb's strength. Now, an electric bulb frosted on the inside was old in the art. Kennedy had disclosed such a product twenty-five years earlier. Moreover, it had long been known in the art that successive acid treatments of glass rounded out the sharp angular crevices produced by the first etching. That was shown in particularity by Reinitzer[3] in 1887 and by Tillotson[4] in 1917. And it was shown in Sprechsaal of 1907 (a German trade paper) that if hollow glass was subjected to a second etching, the surface would have a silk-like appearance, the finish being called satin etching or silk mat.[5] It is true that these prior publications were concerned with frosting for the purpose of obtaining a decorative finish in glass ware or desired optical effects in focusing screens for cameras and the like. But Sprechsaal in 1912 specifically described the application of successive etchings to electric bulbs. And that publication recommended, as Pipkin did years later, that a weaker or diluted etching solution be used for the second etching. Moreover, Wood (patent No. 1,240,398 issued September 18, 1917) observed that successive acid treatments of glass rounded out the sharp angular crevices produced by the first etching, and he applied that idea to electric bulbs as well as to other glass articles. His patent covered the making of light-diffusing screens. He noted that if glass was etched once, the surface was cut into irregular crevices, pits and grooves with the result that only a portion of the light was transmitted. But if after the first etching (which he accomplished by a blast of air charged with a fine dust of flour emery or carborundum) the surface was flowed with acid, the crevices and pits were enlarged and smoothed out into minute concave lenses. These

[3] Die Glashutte of 1887, Contributions to the Knowledge of Glass Etching.

[4] Journal of Industrial and Engineering Chemistry, October 1917.

[5] It was largely on the basis of this prior disclosure that the British patent was held invalid. See British Thomson-Houston Co., Ltd. *v.* Tungstalite, Ltd., *supra* note 1, pp. 288-289.

microscopical lenses diffused the light perfectly and transmitted practically all of it. He noted that his process was especially valuable in the case of certain types of cameras. But he added, "Such a screen is also useful for rendering the bulbs of incandescent lamps diffusing without at the same time causing the very marked loss in the efficiency of the lamp, which results from frosting the bulbs in the usual manner." Wood, to be sure, did not describe frosting the inside of the bulb. Kennedy, however, had shown that. Moreover, prior to Wood it was well known in the art, as we have noted, that successive acid treatments of glass produced a surface characterized by the presence of rounded as distinguished from sharp angular crevices or pits. If there was novelty in applying that process to electric bulbs, Wood achieved it. At least since Kennedy, it was known that inside-frosted electric bulbs were preferable to outside-frosted bulbs.

Wood, of course, was concerned only with light diffusion and transmission primarily of screens, secondarily of electric bulbs. Neither he nor any other before Pipkin appears to have given any indication that the second treatment resulted in any strengthening of the glass. But strengthening was inherent in the method he proposed. And it appears that an electric bulb, which had been frosted inside pursuant to his method, would have inevitably obtained the rounded pits and hence the attendant strength characteristic of the Pipkin bulb.

If A without mentioning the element of strength patented a bulb which was extra strong, B could not obtain a patent on the bulb because of its strength, though he was the first to recognize that feature of it. That is the import of *Ansonia Brass & Copper Co.* v. *Electric Supply Co.*, 144 U. S. 11. That case involved the question of the validity of a patent for an insulated electric conductor. The prior art disclosed a similar method of insulation which was used in connection with the wiring of burglar alarms. Such use involved no problem of combustibility of the insulating material which emerged on the introduction of electric lighting. The insulator disclosed by the prior art was not intended to be, and perhaps was not known to be incombustible. But in fact the earlier insulator had approximately the same degree of incombustibility as that described in the patent. The Court ruled that "the application of an old process to a new and analogous purpose does not involve invention, even if the new result had not before been contemplated." 144 U. S. p. 18. Since the two insulators

were practically the same in their method of construction, the patentee was not allowed to claim the feature of incombustibility as his invention. The benefits of the "potencies and values more important than the uses that were immediately apparent" belong to him who establishes priority of discovery. *Radio Corporation of America* v. *Radio Engineering Laboratories, Inc.*, 293 U. S. 1, 14.

Petitioner, however, insists that this is not a case where the patentee merely observed the advantageous properties of an old article of manufacture. It says that Pipkin created a new article of manufacture, an inside-frosted bulb having an etched inner surface characterized by rounded rather than sharp angular crevices—an article that never existed before. It points out that prior to Pipkin no one knew why inside frosted bulbs were weak nor knew how to remedy the weakness. Pipkin indeed seems to be the first to have recognized that the form of the pitting had an effect on the strength of the glass. The prior art appears to have made no such disclosure. And it is true that the Pipkin bulb met with commercial success. The question remains, however, whether the Pipkin patent was invalid because of anticipation.

It is true that there is a difference between the *Ansonia* case and the present one. There a prior product had been created having qualities which were unrecognized at the time and which later were sought to be patented. On the other hand, it does not appear in the present case that prior to Pipkin electric bulbs had been frosted on the interior with rounded rather than sharp angular crevices or pits. But Wood, as well as the art which preceded him, showed how to produce such a surface on electric bulbs as well as on other articles of glass. Kennedy showed how to frost the inside of an electric bulb. In view of these disclosures it is difficult to see how there could be invention in frosting either the outside or inside of an electric bulb so as to produce saucer-shaped rather than sharp, angular crevices or pits. A product claim describes an article, new and useful. The principle of the *Ansonia* case plainly would deny validity to the Pipkin patent if the prior art disclosed an electric bulb so frosted on the inside as to round out the angular crevices produced by the first etching, whether the full utility of the bulb had been previously recognized or not. The same result is indicated where, as in the present case, the prior art discloses the method of making an article having the

characteristics of the patented product, though all the advantageous properties of the product had not been fully appreciated. *Lovell Mfg. Co.* v. *Cary*, 147 U. S. 623. Pipkin found latent qualities in an old discovery and adapted it to a useful end. But that did not advance the frontiers of science in this narrow field so as to satisfy the exacting standards of our patent system. Where there has been use of an article or where the method of its manufacture is known, more than a new advantage of the product must be discovered in order to claim invention. See *De Forest Radio Co.* v. *General Electric Co.*, 283 U. S. 664, 682. It is not invention to perceive that the product which others had discovered had qualities they failed to detect. See *Corona Cord Tire Co.* v. *Dovan Chemical Corp.*, 276 U. S. 358, 369.

Affirmed.

Mr. Justice JACKSON took no part in the consideration or decision of this case.